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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,524	09/02/2003	Malcolm David Mac Farlane	AETPAT007US	3345
43737	7590	04/30/2008	EXAMINER	
John R. Casperson			PATEL, NIKETA I	
P.O. Box 36369			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/653,524	MAC FARLANE, MALCOLM DAVID
	Examiner	Art Unit
	NIKETA I. PATEL	2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 January 2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 8,10,11,13,23,29,32,34,36 and 38 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7,9,12,14-22,24-28,30,31,33,35,37 and 39-43 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7, 9, 12, 14-22, 24-28, 30-31, 33, 35, 37, and 39-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1-7, 9, 12, 14-22, 24-28, 30-31, 33, 35, 37, 39-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In general claims are poorly written, for example: claim 1, lines 10-13; claim 15, lines 10-12 and claim 43, 10-13 recites, ‘...operable to cause analog signals to be transmitted from the first input to the voice communication device from the sound card output’. It is unclear as to what the applicant intends to claim by reciting this limitation.

Furthermore, the independent claims 1, 15 and 43 appear to be incomplete since the structural cooperative relationships between the elements ‘first input’, ‘first output’ and the ‘control circuitry’; ‘audio adapter’, ‘sound card output’, ‘sound card input’ and ‘control circuitry’ are omitted, such omission amounting to a gap between the necessary structural connections.

The dependent claims 2-7, 9, 12, 14, 16-22, 24-28, 30-31, 33, 35, 37, 39-42 inherit the same deficiency due to the dependency on independent claims 1 and 15.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. As far as the examiner can interpret the claims in light of the 35 USC § 112 rejection supra, claims 1, 3-7, 9, 12, 14-15, 17-22, 24-28, 30-31, 33, 35, 37, 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juszkieicz et al. U.S. Patent Number: 6,353,169 B1 (hereinafter “Juszkieicz”) and further in view of Yeh et al. U.S. Patent Number: US 6,366,653 B1 (hereinafter “Yeh”).

6. **Referring claims 1, 15, 43,** Juszkieicz teaches, in taking claims 1 as exemplary, an audio voice control system, comprising: a. first input switchably coupled to a sound card output at first selection circuitry of an audio adapter [see figure 1, elements 17, 22, 28, 12, 14, 18; figure 2, element 27 and column 33, lines 57-67 and column 5, lines 40-67; column 34, lines 1-6 – various types of instruments are connected to a hub which is then connected to the laptop and the sound board, each of the instruments are switchably coupled since the system allows one to choose a desired instrument]; b. a first output switchably coupled to a sound card input at second selection circuitry of the audio adapter [see figure 1, elements 17, 22, 28, 12, 14, 18 and

column 33, lines 57-67 and column 5, lines 40-67; column 34, lines 1-6]; and c. a voice communication device coupled to and operable to activate control circuitry, the voice communication device further operable to receive and to transmit analog signals to the control circuitry [see figure 1, elements 12, 14, 18; figure 2, element 27 and column 5, lines 40-67; column 34, lines 13-17; column 36, lines 36-59 – both digital and analog signals can be used]; wherein the control circuitry is coupled to the first selection circuitry, the second selection circuitry, and the voice communication device [see column 5, lines 40-67; column 34, lines 13-17; column 36, lines 36-59], and is operable to cause analog signals to be transmitted from the first input to the voice communication device from the sound card output and to cause analog signals to be transmitted from the voice communication device through the first output to the sound card input when activated for voice communication [see column 5, lines 40-67; column 34, lines 13-17; column 36, lines 36-59], and to cause analog signals to be transmitted from input circuitry to the sound card input and to cause analog signals to be transmitted from the sound card output to the output circuitry when activated for a music session, the input circuitry being operable to receive analog signals from at least one of a microphone and a musical instrument [see column 5, lines 40-67; column 34, lines 13-17; column 36, lines 36-59.] *Juszkiewicz* teaches the use of RJ-45 connector for communication and using a headset as a voice communication device [column 9, lines 5-10 and figure 2, element 27] however does not set forth the limitation of a voice communication device for making and receiving telephone calls. *Yeh* discloses a use of RJ-45 connector

connect a telephone [column 4, lines 5-12] in order allow a user to integrate a computer with a telephone and provide a user friendly communication interface.

One of ordinary skill in the art at the time of applicant's invention would have clearly recognized that it is quite advantageous for the system of *Juszkiewicz* to implement a voice communication device for making and receiving telephone calls in order allow a user to integrate a computer with a telephone and provide a user friendly communication interface. It is for this reason that one of ordinary skill in the art would have been motivated to implement a voice communication device for making and receiving telephone calls.

7. **Referring to claims 3, 17,** the combination of *Juszkiewicz* and *Yeh* teaches wherein at least one of the first selection circuitry and the second selection circuitry comprises circuitry from one of the group consisting of a multiplexer and a switch [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20; column 36, lines 36-59.]

8. **Referring to claims 4, 18,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the first input is releasably switchably coupled to the sound card output at the first selection circuitry, and the first output is releasably switchably coupled to the sound card input at the second selection circuitry [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20; column 36, lines 36-59.]

9. **Referring to claims 5, 20,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the output circuitry is operable to maintain resistive isolation of the analog signals transmitted from the input circuitry to the sound card input from the analog

signals transmitted from the sound card output to the output circuitry [see column 33, lines 57-67; column 34, lines 1-20 – control board allows one to select an audio from plurality of instrument therefore it is resistively isolating one audio signal from that of the other instruments.]

10. **Referring to claims 6, 35,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the output circuitry is operable to maintain resistive isolation of the analog signals received from the at least one of the microphone and the musical instrument from the analog signals transmitted from the sound card output to the output circuitry [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

11. **Referring to claims 7, 19,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the analog signals caused by the control circuitry to be transmitted from the first input to the voice communication device from the sound card output when activated for voice communication comprise signals converted from digital voice communication data received from a computer coupled to the sound card input and the sound card output [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

12. **Referring to claim 9,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the voice communication device is releasably coupled to the control circuitry [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

13. **Referring to claims 12, 37,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the voice communication device comprises a headset [see figure 2, element 27 and column 34, lines 13-15.]

14. **Referring to claims 14, 39,** the combination of *Juszkiewicz* and *Yeh* teaches further comprising volume monitoring circuitry coupled to the sound card output and the first selection circuitry and operable to monitor at least one parameter of the analog signals transmitted from the sound card output to the first input to the voice communication device, the at least one parameter being selected from the group consisting of amplitude and frequency [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

15. **Referring to claims 21, 28, 40,** the combination of *Juszkiewicz* and *Yeh* teaches which is operable to control the receiving, processing, and routing of digital voice communication data from communication ports, and to control the receiving, processing, and routing of analog voice data for transmission in digital form to communication ports [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

16. **Referring to claims 22, 41,** the combination of *Juszkiewicz* and *Yeh* teaches which is operable to control the receiving, processing, and routing of digital voice communication data from sound card output and to control the receiving, processing, and routing of analog voice data to sound card input [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

17. **Referring to claims 24, 30,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the control circuitry is activated by inputs from the group consisting of voice commands, programmable key pads, wireless technologies, electromechanical buttons and switches, and voice controlled hand and foot controllers [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

18. **Referring to claims 25, 31,** the combination of *Juszkiewicz* and *Yeh* teaches further comprising a third output coupled to the control circuitry and releasably coupled to a computer, wherein the control circuitry is operable to send voice computer control commands to the computer [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

19. **Referring to claims 26, 42,** the combination of *Juszkiewicz* and *Yeh* teaches wherein controls are coupled to an adapter housing to allow the control switching to be performed within the adapter [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

20. **Referring to claim 27,** the combination of *Juszkiewicz* and *Yeh* teaches wherein the control circuitry is operable to control the receiving, processing, and routing of analog voice data [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

21. **Referring to claim 33,** the combination of *Juszkiewicz* and *Yeh* teaches further comprising releasably coupling the voice communication device to the control circuitry [see column 5, lines 40-67; column 33, lines 57-67; column 34, lines 1-20.]

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 2, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Juszkiewicz* and *Yeh* as applied to claims 1, 15 above, and further in view of *Radomski* U.S Patent Number: 6,507,790B1 (hereinafter “*Radomski*”.)

24. Referring to claims 2, 16, the combination of *Juszkiewicz* and *Yeh* teaches the limitations recited in claims 1 and 15, however does not set forth the limitation of wherein the input circuitry is further operable to perform common mode rejection on the analog signals received from the at least one of the microphone and the musical instrument. *Radomski* teaches to perform common mode rejection on the analog signals [see column 8, lines 41-52] in order to improve audio/sound quality.

One of ordinary skill in the art at the time of applicant’s invention would have clearly recognized that it is quite advantageous for the system of *Juszkiewicz* to be able to provide better sound quality by performing common mode rejection on the analog signals. It is for this reason that one of ordinary skill in the art would have been motivated to implement common mode rejection on the analog signals to improve audio/sound quality.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIKETA I. PATEL whose telephone number is (571)272-4156. The examiner can normally be reached on M-F 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272 4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Niketa I. Patel/
Primary Examiner, Art Unit 2181